



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SR-6J

October 6, 2015

Mr. Gary D. Uphoff
Principal
Environmental Management Services Company
5934 Nicklaus Drive
Fort Collins, Colorado 80528

Subject: Old American Zinc (OAZ) Superfund Site, Fairmont City, Illinois
Pre-Design Investigation Report dated August 2015

Dear Mr. Uphoff:

The United States Environmental Protection Agency (EPA) has reviewed the Pre-Design Investigation (PDI) Report dated August 2015 for the Old American Zinc Plant Site in Fairmont City, Illinois. EPA's comments are enclosed.

Please submit a revised PDI Report that incorporates all comments within 30 days of receipt of this letter. If you have any questions or comments regarding this letter, please contact me at (312) 353-4150 or via email at desai.sheila@epa.gov.

Sincerely,

A handwritten signature in cursive script, reading "Sheila Desai", is positioned above the typed name.

Sheila Desai
Remedial Project Manager

Enclosure

cc: Michael Haggitt, Illinois EPA
Rachel Grand, CH2M Hill

**EPA COMMENTS ON PRE-DESIGN INVESTIGATION REPORT
DATED AUGUST 31, 2015
OLD AMERICAN ZINC PLANT SITE
FAIRMONT CITY, ILLINOIS**

GENERAL COMMENTS

1. Please state the level of validation performed and what percentage of the data per matrix was validated at each level. The Quality Assurance Project Plan Addendum states that: "data validation will be performed on 10 percent of the laboratory soil and groundwater sample data, as consistent with approved EPA protocol at previous Superfund projects in Illinois. If significant errors that affect data quality are detected, the percentage of raw data validated will be increased to assess the magnitude of the problem." It doesn't appear that this was performed.
2. Please add a section explaining any deviations from the approved plan (for example, the well that was relocated due to field conditions, groundwater sample collected from MW-3 when turbidity was above 50 NTU and pump rate was not lowered to 100 mL/min as described in the Field Sampling Plan) or any difficulties or problems encountered executing the plan (for example, the purge form for MW-3 indicates the field team could not get a low enough pumping rate, the report should discuss why).
3. Please generate figures showing the lateral extent of chemicals in groundwater and groundwater flow direction, similar to Figures 27 and 28 in the Remedial Investigation Report.

SPECIFIC COMMENTS

1. Page 6, section 2.3.1, first paragraph 3rd sentence: Note in the report if the bentonite chips used for the seal were hydrated before emplacement of the grout.
2. Page 8, Section 2.3.2 first paragraph: Note in the report what size filter was used.
3. Page 14, Section 3.1.4: Include the depth and soil classification of the samples collected.
4. Page 17, Precision, first paragraph: Define acceptable variations. It is not clear if exceedances were observed which did not impact the samples or if all acceptance criteria were met.
5. Page 17, Accuracy, second paragraph: The first sentence needs to be expanded to include the review of laboratory control sample (LCS), matrix spike/matrix spike duplicate (MS/MSD) and instrument calibration in the assessment of accuracy as the paragraph indicates there were issues with MS/MSD and instrument calibration issues. Please indicate the impact these issues have on the quality of the data (i.e., biased high/low).
6. Table 1: All acronyms and abbreviations should be defined for each table.

7. Table 1 and 2: Sample depth units are different, make consistent between feet and inches, and note that samples were collected below ground surface.
8. Table 3: Define dashes and less than symbol.
9. Table 4: Groundwater depths were collected over 3 days, note any rain events that may have affected the results.
10. Table 6: Remove phone numbers (privacy information) from final copy of report and provide separately to EPA.
11. Table 7: In the notes, include "FY" in the sampling convention description.
12. Figure 1 and 2: Add waterway/ditch symbol to legend (green line).
13. Figure 1: Add a visible line for site boundary.
14. Figure 3: Add proposed excavation areas and consolidation areas to figure.
15. Appendix B: Please include approximate sample locations on these cross sections.
16. Appendix B: The text in the title block is incorrect: "Blue Tree" should be "Blue Tee", some letters are replaced with symbols.
17. Appendix G and H: Enclosure for these appendixes were switched in the hard copy and PDF, please correct for the final document.
18. Appendix G: MW-4, MW-5, MW-8, MW-9, MW-10, MW-24: Record the depth of pump inlet.